

### PHENIX WEEKLY PLANNING



3/05/2009 Don Lynch





### Yesterday's Maintenance Access Day - Activity Report

TEC ES2 LV Troubleshooting

RPC Grounding Issues (IR & Tunnel Access)

MuTRigger FEE Issues?

HBD Issues?

Other Issues?

Next Maintenance Access Day - March 18

Work requests?

CM lift table

Note: accessibility of current control info (water flow HVAC etc. plots, webcams > access Forbidden

### PHENIX

### Run Support & Other Ongoing Work

Run Technical Support (mechanical, electrical and gas systems

As needed  $\rightarrow$  always takes priority

RPC Factory Support (continuing)

(see slides later)

### Prep for 2009 Shutdown

Design PC1 East maintenance support fixtures design 3/31, fabrication 5/31

NCC prototype design support (on-going med. priority)

VTX fabrication tooling design (on-going med. priority)

VTX installation design (on-going med. priority)

FVTX design/eng'g support (no support requested yet)

MMS Scaffolding Design

design 2/27, ordering/fabrication 5/1

New Beampipe supports (back logged)

### RPC3 North installation Prep

Installation plan (including installation site prep plan) 3/6

RPC Quarterly Review 3/12 & 3/13

Installation fixture design 4/3

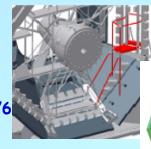
Installation fixture fabrication 6/26

Rack Room, AH, Trailer, Mixing House, etc. (ongoing)







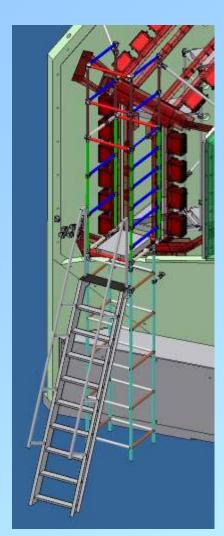


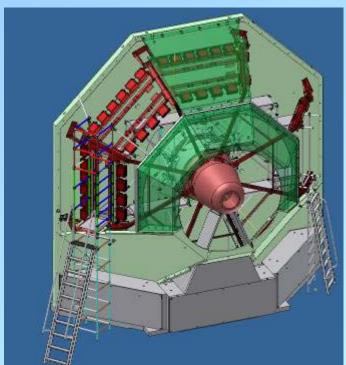


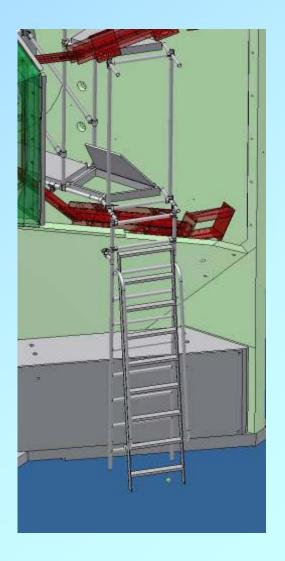


### PH<sup>®</sup>ENIX

### MMS Scaffolding Design



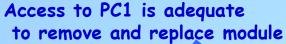




### **PH**ENIX

### PC1 East Repair Fixturing Design

Repairs to be performed during '09 Shutdown

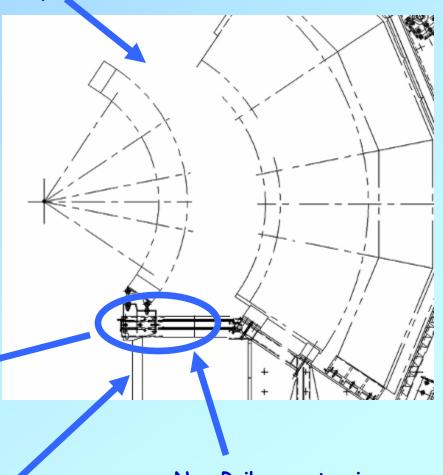








New Column Supports Under railway extensions New Railway extensions will allow DC to be pulled out ~ 3 feet more







### TECHZICAL SUPPORT 20 0

### RPC Factory Change in Scope

### Remaining Action Items:

- Review the mechanical design of the burn-in assembly and the dolly system to be used in moving the  $\frac{1}{2}$  octant units. Design In Progress, Review to follow
- Update the RPC high voltage and gas procedures if necessary (Giannotti, Pisani Mar 13, 2009) In progress, Safety systems procedure revision is Done
- Add individual output valves to the burn-in unit gas schematics (Pisani, Mar 13, 2009) In progress
- Get a permit for the R134 added consumption (Pisani, Van Essendelft, Jan 30, 2009) Done
- Review the flammable compressed gas system piping (Gaffney, Pisani Jan 30, 2009)
   Done





### RPC Factory Support Tasks:

- Complete the Dark Current Test Stand (Done)
- Order materials for Burn-in Test Stand (Done)
- · Complete design of Tilting Transport Table (2/13) Done Review needed
- Order materials for the Tilting Transport Table (In Progress)
- Order additional shelf units for gap, module and RPCstructural component storage (Done)
- Design and order environmental control system for Burn-In Test Stand (3/20)
- Assemble gap & module storage with humidity control existing shelves (3/13), full complement of shelves (3/27)
- Assemble structural component storage
   existing shelves (2/27), full complement of shelves (3/13)
- Assemble tilting transport table 3/20
- Assemble burn-in test stand (bike rack) 4/10
- Extend gas, electric and safety systems to Burn-In Test Stand (4/10)

### TECHZICAL SUPPORT 2009

### Module and Gap Storage with humidity Control

### RPC Factory

Burn-in test stand (bicycle rack)

Dark Current Test Stand Detail parts storage for Module and  $\frac{1}{2}$  octant structural parts

Tilt Table for Assembly and Handling  $\frac{1}{2}$ -octants and later station one octants





# TECHZICAL SUPPORT 2009

### Dark Current Test Stand under construction





RPC1 Prototype

Tests begining







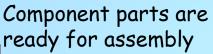
### Half-Octant Assembly Tilt Table

### RPC Factory

# TECHZICAL SUPPORT 2009

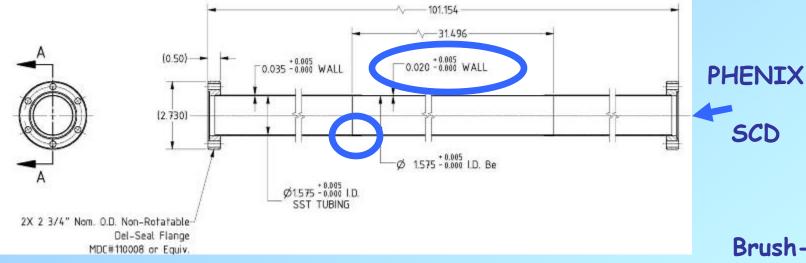


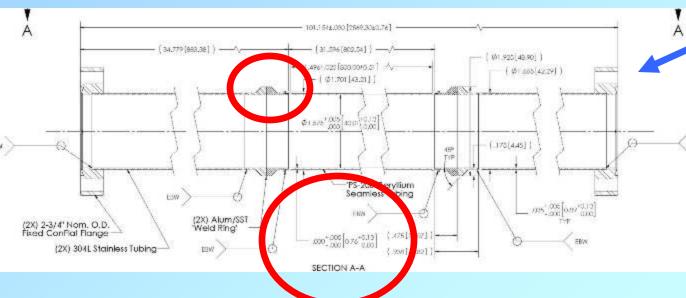
Mechanical Analyses Completed and submitted for review











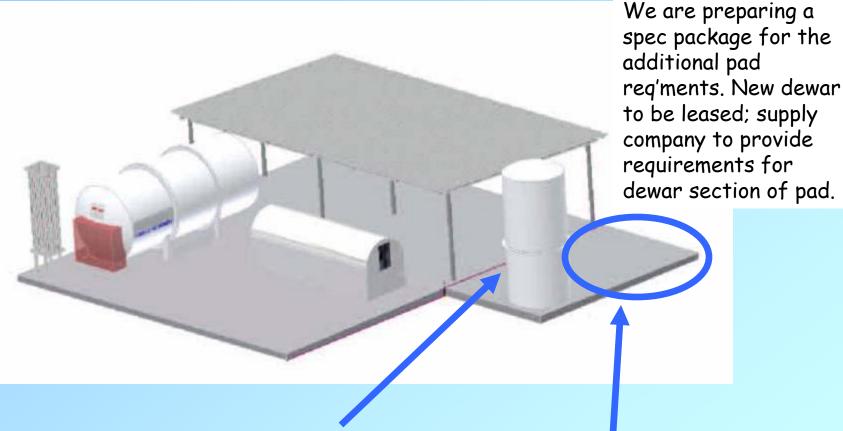
Brush-Wellman CAP

SCD

We expect revised CAP by tomorrow, and quotes for transition and spool sections from CS shortly

### PH ENIX

### Gas Pad Upgrade & Ar Dewar



New Liquid Argon Dewar to meet current and future demand

Additional Pad area for storage of empty gas bottles

General location as shown, footprint (size) TBD



### 2009 Building Maintenance Issues

- Roof leak in utility bathroom at northwest corner behind tech offices.
- · Roof leak over door between rack room and assembly hall.
- Trailer bathroom slop sink (for Custodians).
- Heat wrap tape for trailer bathroom toilet drains to prevent freeze/clogging in winter.
- New duct heater (This item is in progress and should be completed soon)
- Improved Rack Room AC performance (This item has been addressed time and again but unsatisfactorily. Currently the AC fails periodically and is repaired only to fail again. On-condition maintenance is not adequate...an engineered solution is needed.)



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### PHENIX

### Shutdown '09 Major tasks (expect 5 month shutdown):

- 2009 shutdown Begins April 10, or July 1, 2009 or July 15 or ?????
- End run, remove wall, MuID collars down, EC to AH (3 weeks)
- Install Station 1 South scaffolding (1 week)
- Install Station 2/3 scaffolding (2 weeks)
- PC1 East repair (4 weeks)
- Install stations 1, 2 and 3 south MuTrigger FEE's (12 weeks)
- MuTr decapacitations: station 3 south (3 weeks)
- RPC Station 3 North (12 weeks)
- Mechanical/Electrical Plumbing installation of (4) new DCM racks
- Add Ar Dewar and expand gas pad to add storage (12 weeks)
- Prep for future upgrades/existing equipment maintenance & Repair (as necessary)





### Safety, Security, etc.

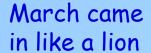
- 1. PHENIX Annual Safety Review Remaining Action Items:
  - · Settle the CM magnet ladder railings (Lynch, Pearson Phillips Feb 4, 2009) Don and Dave to resolve
  - · Update the documented work procedures. (Lynch) Ongoing
  - · Add HSSD to the 1008 Assembly Hall (Phillips/ Levesque Mar 1, 2009) This is a C-A issue.
- 2. Management walkthru of the RPC Factory this morning:

No significant observations

3. Winter is still with us (as if you didn't notice.) Drive carefully and walk carefully, especially in the mornings. All of this snow is melting during the day and re-freezing at night. Be especially aware on the trailer steps. They can get very slippery.



### Where To Find PHENIX Engineering Info





Will it go out like a lamb?









Links for the weekly planning meeting slides, archives of past meeting slides, long term planning, pictures, videos and other technical info can be found on the PHENIX Engineering web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\_SSint-page.htm

